

Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in the application.

1. (Currently amended) A transverse electrodisplacive actuator array for controlling the optical phasing of a reflective surface comprising:
  - a support structure;
  - a plurality of ferroic electrodisplacive actuator elements extending from a proximate end at said support structure to a distal end; each actuator element including at least one addressable electrode and one common electrode spaced from said addressable electrode and extending along the direction of said proximate and distal ends along ~~the~~ a transverse ~~d<sub>31</sub>~~ strain axis;
  - a reflective member having a reflective surface and a mounting surface mounted on said actuator elements; and
  - a plurality of addressable contacts and at least one common contact for applying voltage to said addressable and common electrodes to induce a transverse strain in addressed actuator elements to effect an optical phase change in the reflective surface at the addressed actuator elements.
2. (Original) The transverse electrodisplacive actuator array of claim 1 in which said support structure and said actuator elements are integral.
3. (Original) The transverse electrodisplacive actuator array of claim 1 in which

said actuator elements are electrostrictive.

4. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are magnetostrictive.

5. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are piezoelectric.

6. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are lead magnesium niobate.

7. (Original) The transverse electrodisplacive actuator array of claim 1 in which said addressable contacts are on a surface of said support structure.

8. (Currently amended) The transverse electrodisplacive actuator array of claim 7 in which said addressable electrodes extend through said support structures structure to said addressable contacts.

9. (Original) The transverse electrodisplacive actuator array of claim 1 in which said common contact is on a surface of said support structure.

10. (Original) The transverse electrodisplacive actuator array of claim 9 in which said common electrodes extend through said support structure to said common contact on

said support structure.

11. (Original) The transverse electrodisplacive actuator array of claim 1 in which said common contact is on the said reflective member.

12. (Original) The transverse electrodisplacive actuator array of claim 11 in which said common electrodes extend through said actuator elements to said common contact on said reflective member.

13. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are a ferroelectric material.

14. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are a ferromagnetic material.

15. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are a lead zirconate titanate.

16. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are a ferroic ceramic.

17. (Original) The transverse electrodisplacive actuator array of claim 1 in which said actuator elements are single crystal materials.